

# **FMCSA Specifications for Federal Procurements Of Field Portable Computers and Peripherals**

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This document provides specifications for FMCSA procurements of portable computer and peripheral hardware for field use. These specifications must be followed for all FMCSA procurements that meet the definitions below. The specifications in this document are updated two-to-four times per year and upon request.

If you have any questions regarding these specifications, please contact Jeff Hall or Janet Curtis with the FMCSA Systems Development Team.

## **Table of Contents**

FIELD LAPTOPS (Updated 3/05/2007) .....	2
MANAGER LAPTOPS (Updated 3/06/2007) .....	3
PORTABLE PRINTER (Updated 3/08/2007) .....	5
4-IN-1 MULTI-FUNCTION PRINTER (Updated 3/06/2006) .....	6
PORTABLE SCANNER (Updated 5/25/2007) .....	7
DIGITAL CAMERA (Updated 8/08/2006) .....	8
MANAGER PDA (Updated 8/09/2006) .....	9
FIELD-ACTIVITY PDA (Updated 8/09/2006) .....	10
EXPANDED MANAGER PDA (Updated 8/09/2006) .....	11
DIGITAL PROJECTOR (Updated 8/09/2006) .....	12
BARCODE SCANNER/READER (Updated 3/09/2007) .....	13
DC POWER ADAPTERS FOR PANASONIC (Updated 3/09/2007) .....	14
LAPTOP CARRYING CASE (Updated 5/11/2007) .....	15
MEDIA TYPES (Updated 5/16/2007) .....	16

## FIELD LAPTOPS (Updated 3/05/2007)

This specification will be used for procuring laptops for use in conducting Compliance Reviews, Safety Audits, and Inspections. FMCSA no longer utilizes a separate specification for Inspection laptops. This is a three spindle laptop, with integrated hard drive, CD drive, and floppy drive.

- Panasonic ToughBook 51 CF-51PFVGEBM
  - Intel® Core™ Duo Processor 2500 – 2.0GHz
  - 512MB SDRAM standard, expandable to 4GB recommend 1024MB+
  - 15" 1600 x 1200 (UXGA) TFT Active Matrix Color LCD
  - 80GB HDD (shock-mounted & easily removable)
  - 1.44MB FDD Standard (integrated)
  - DVD-ROM/CD-RW Standard
  - Electrostatic touchpad with scrolling support
  - Intel PRO/Wireless 2200BG network connection 802.11a/b/g
  - 56K modem (integrated) & 10/100/1000 Ethernet card (integrated)
  - Two USB 2.0 ports and one 1394 Firewire port
  - PC CardType II x2 or Type III x1, Secure Digital (SD) Card
  - 6.8 lbs, including battery, 1.9"(H) x 10.9"(D) x 12.8"(W)
  - Windows XP SP2 Operating System
  - 3 year warranty
  - Additional information:  
[ftp://ftp.panasonic.com/pub/panasonic/toughbook/specsheets/TB-51\\_ss.pdf](ftp://ftp.panasonic.com/pub/panasonic/toughbook/specsheets/TB-51_ss.pdf)
  - Estimated price \$2581.00



- Panasonic Accessories
  - Port Replicator CF-VEB512W
  - AC Adapter (for Port Replicator) CF-AA1683AM
  - ToughMate – always on carrying case CF-FM5051
- Additional Accessories
  - Super Mini Optical Mouse USB w/ PS/2 AD ACC-MS15000

## MANAGER LAPTOPS (Updated 3/06/2007)

This specification is for a lightweight laptop for use primarily for e-mail, scheduling, address book information, and minimal word processing. Although the specified unit can be used for much more, the trade-off for going with a lightweight unit is a decrease in ease-of-use. If a manager feels he/she will be running CAPRI, ASPEN, CaseRite, or performing a great deal of word processing, we recommend procuring the standard SI laptop.

- Panasonic Toughbook W5 CF-W5LWEZZBM
  - CPU – Intel Core Solo 1.2GHz, L2 Cache, 553 MHz FSB
  - Weight - 2.9 lbs
  - RAM - 512 MB (expandable to 1536MB) recommend 1024MB+
  - HDD - 60 GB shock mounted
  - NIC - Integrated 56k modem and 10/100 network interface card
  - Wireless – Integrated Intel® PRO/Wireless 2915 802.11 a/b/g
  - Optical Drive - Integrated Combo DVD-ROM/CD-RW Drive
  - Display - 12.1" 1024 x 768 XGA anti-glare 128MB VRAM
  - External video support for 2048 x 1536
  - USB - Two 2.0 ports
  - PC Card – Type II x 1
  - Keyboard/Mouse – 83 key, Electrostatic touchpad -vertical scrolling
  - Warranty - 3 year limited, parts & labor
  - Case - Full Magnesium Alloy Case
  - OS – Windows XP
  - Additional information:  
[ftp://ftp.panasonic.com/pub/Panasonic/toughbook/specsheets/TB-W5\\_ss.pdf](ftp://ftp.panasonic.com/pub/Panasonic/toughbook/specsheets/TB-W5_ss.pdf)
  - Estimated price \$2000.00



- Panasonic W5 accessories (required to make this a complete solution)
  - External USB Floppy Drive CF-VFDU03W
  - AC Adapter CF-AA1623AM
- Additional Accessories
  - Pocketmouse Mini Wireless 72229
- Panasonic W5 accessories (required to make this a complete solution)
  - 512 MB RAM upgrade (512 total) CF-WMBAV0512U

## RUGGED TABLET PC (Updated 6/08/2006)

This specification will be used for procuring laptops for use in conducting Compliance Reviews, Safety Audits, and Inspections. Although the specified unit can be used for much more, the trade-off for going with a lightweight unit is a decrease in ease-of-use. For the Rugged ability this unit must be used with the Otterbox.

- Fujitsu Stylistic ST5031 with OtterBox 4600 Tablet Case
  - CPU - Ultra Low Voltage Intel® Pentium® M Processor 1.2MHz
  - Weight – 3.5 lbs
  - RAM - 512MB (SDRAM)
  - HDD - 60 GB shock mounted
  - NIC - Integrated 56k modem and 10/100/1000 network interface card
  - Wireless – 802.11b
  - Display – 10.4" XGA TFT Indoor/Outdoor
  - USB - Two 2.0 ports
  - PC Card – one type I or II
  - Warranty - 3 year limited, parts & labor
  - Case - Rugged
  - OS – Windows XP Tablet PC Edition 2005
  - Additional information:  
[http://www.computers.us.fujitsu.com/www/products\\_pentablets.shtml?products/pentablets/tech\\_specs/st5030\\_31\\_32\\_ts](http://www.computers.us.fujitsu.com/www/products_pentablets.shtml?products/pentablets/tech_specs/st5030_31_32_ts)
  - Estimated price \$2449.00



- OtterBox PC Case FPCCC54:  
[http://www.otterbox.com/products/pc\\_cases/tablet/index.htm](http://www.otterbox.com/products/pc_cases/tablet/index.htm)

## PORTABLE PRINTER (Updated 3/08/2007)

This specification is to be used for both investigators and inspectors. Portable printers are procured and serviced for investigators and inspectors through the FMCSA Technical Support hotline.

- HP Deskjet 460 Series (WT or WBT) C8152A
  - WT = 802.11 wireless / WBT = Bluetooth
  - Both units come with a 2300mAH Lithium ion battery (5lbs)
  - Speed: Up to 17 ppm in black / 16 ppm in color
  - Resolution: Black – 1200 x 1200 dpi; Color 4800 x 1200 dpi
  - Compatibility: Windows® Vista/XP/Me/2000/98/4.0 and MAC OS 10x  
(\*Note: This unit is not DOS compatible)?
  - Wireless printing: 802.11, and / or Bluetooth (depending on model or optional adapter)
  - Sheet feeder: 50 sheets, integrated
  - Interfaces include USB 2.0, CompactFlash, Multimedia, Secure Digital, PictBridge, 802.11 and or Bluetooth
  - 32MB RAM
  - 4.6 lbs
  - Additional information:
  - <http://h10010.www1.hp.com/wwpc/us/en/sm/WF06b/18972-236251-236267-14438-236267-466639-466642-466643.html>
  - USB cable included
  - Estimated price \$350.00



- Accessories:
  - HP 802.11g printer card CB001A#A2L
  - HP Bluetooth printer card CB004A
  - HP compact carrying case C8242A

#### 4-IN-1 MULTI-FUNCTION PRINTER (Updated 3/06/2006)

This specification should be used when procuring an all-in-one device for telecommuters. This is a desktop printer, fax, and scanner. The unit specified is not portable. Cables are procured separately. 4-in-1 printers are procured and serviced locally.

- HP OfficeJet 7410
  - Color Print/Copy/Scan/Fax
  - Connectivity – USB, Ethernet, 802.11b Wireless, PictBridge
  - RAM – 96mb
  - Printer – Color inkjet, up to 30 ppm, 4800x1200 dpi resolution
  - Print Media – Paper (plain, inkjet, photo, banner), envelopes, transparencies, labels, cards, HP Premium Media, iron-on transfers, borderless media, panoramic media, banners
  - Fax speed– 3 seconds per page, Color, 150 page memory
  - Scanner – 2400x4800 dpi, 48 bit color
  - Copier – Up to 30 pages per minute (black and white)/20 pages per minute color
  - Weight – 31.3 .lbs
  - For additional information:  
<http://h71016.www7.hp.com/dstore/MiddleFrame.asp?page=config&ProductLineId=494&FamilyId=1371&BaseId=12607&oi=E9CED&BEID=19701&SBLID=>
  - Estimated price \$499.00



## **PORTABLE SCANNER (Updated 5/25/2007)**

This specification will be used when procuring portable scanners for use by investigators and inspectors.

- Plustek OpticSlim M12 Corporate
  - Connectivity – USB (powered by USB)
  - Resolution – 600x600 dpi
  - Scanner bit depth (color) – 48-bit
  - Weight – 11.6 oz
  - Dimensions – 10.8" x 1.9" x 1.3"
  - Software includes:
    - Readiris Pro 10
    - PageManager 6.07
    - ImageFolio 4
  - OS – Win 98SE/2000/ME/XP
  - Additional information:  
[http://www.plustek.com/product/m12\\_corp.asp](http://www.plustek.com/product/m12_corp.asp)
  - Estimated price \$299



## DIGITAL CAMERA (Updated 8/08/2006)

This specification will be used when procuring digital cameras for use by investigators and inspectors. A digital camera is an excellent tool for documenting violations such as a cracked trailer frame.

- Canon PowerShot S80
  - Resolution – 8 Megapixel
  - Zoom – Wide Angle 3.6x optical / 4x Digital / 14x combined
  - 21 shooting modes
  - Macro function
  - Body – All metal
  - Lens cover – Sliding door built into body
  - Flash – Built in
  - Battery – Lithium ion, rechargeable NB-2LH
  - Weight – 7.94 oz for camera body only
  - Connectivity – USB 2.0
  - Storage media – SD memory card, multimedia card
  - Software includes:
    - Drivers & Utilities
    - Canon PhotoStitch
    - Canon ZoomBrowser EX
    - ArcSoft PhotoImpression
    - ArcSoft VideoImpression
    - Canon ImageBrowser
    - Canon Remote Capture
  - PC Requirements:
    - Operating System – Windows 98, ME, 2000, XP
    - Built-in USB ports
    - CPU – Pentium 150 or faster, 300 or faster (XP)
    - RAM – 128 MB for XP, 64 MB for other OS
  - Additional information -  
<http://www.usa.canon.com/consumer/controller?act=ModelTechSpecsAct&categoryid=144&modelid=12074>
  - Estimated price - \$499.00



- Recommended accessories for digital camera
  - SD memory card 512 MB
  - Canon soft case (PSC-30)



## PERSONAL DIGITAL ASSISTANT (PDA)

FMCSA has established three specifications for handheld computer devices. The first is for use by managers solely as a personal information management tool and is referred to as the "Manager PDA." The unit is small and lightweight, but lacks expandability. The second unit is for use by field personnel in conducting enforcement activities such as driver/vehicle inspections and is referred to as the "Field Activity PDA." This unit is somewhat larger, heavier and expensive, but is much more flexible, expandable, and has integrated wireless LAN connectivity. The third is for personnel that need a PDA with a built-in keyboard for more text entry. This is referred to as the "Expanded Manager PDA."

### MANAGER PDA (Updated 8/09/2006)

- Dell Axim X51 520Mhz
  - Processor – PCA270 520Mhz
  - Memory - 64 MB SDRAM 128MB Flash ROM
  - Operating system – MS Windows® Mobile™ 5.0
  - Weight – 4.9 oz
  - Dimensions – 4.7 x 2.9 x .7 in
  - Expansion slot – 1 CompactFlash Type II and 1 SD
  - Display – Transflective 3.5" TFT with LED backlight, 65K colors 16-bit, 240x320 resolution
  - Input type – Pen and touch 5-way navigation button
  - External input/output ports – Bluetooth, 802.1b Wireless, IR, Cradle/Synch/Power Port, 3.5mm audio
  - Software – Media Player 10 Mobile - Includes Calendar, Contacts, Tasks, Voice Recorder, Notes, Word Mobile, Excel Mobile, PowerPoint Mobile, Internet Explorer Mobile, Windows Media Player 10 Mobile, Calculator, Pictures, Jawbreaker, Solitaire, Messaging, File Explorer, MSN Messenger, Terminal Services Client, VPN Client, Infrared Beaming, Clock, Align Screen, Memory, Volume control, Landscape Mode support, WPA (Wi-Fi Protected Access); Bluetooth utility, Certificates Manager, Password setting, Today theme tool, Download Agent
  - Additional hardware included – USB synchronization cable, AC adapter, battery, charger adapter, 3.5mm audio adapter
  - Warranty – 1 year
  - Additional information-  
[http://www.dell.com/content/products/productdetails.aspx/axim\\_x51\\_520?c=us&cs=04&l=en&s=bsd](http://www.dell.com/content/products/productdetails.aspx/axim_x51_520?c=us&cs=04&l=en&s=bsd)
  - Estimated price \$399.00      Sale: \$299.00



- Recommended accessories for Dell Axim X51
  - 2200mAH second longer life battery
  - Rhinoskin aluminum hardcase

## FIELD-ACTIVITY PDA (Updated 8/09/2006)

- Dell Axim X51v
  - Security – Wireless Security
  - Wireless – IrDA, Bluetooth, IEEE 802.11b
  - Processor – Intel® 624 MHz
  - Memory – 64MB RAM 256MB Flash ROM
  - Operating System – Windows Mobile 5.0
  - Weight – 6.2 oz
  - Dimensions – 4.7" x 2.9" x .7"
  - Expansion slot – SD and CF slots
  - Display – 3.7" transfective VGA TFT display, portrait and landscape modes, LED backlight with power save mode
  - Input type – Stylus, Touch-screen
  - Software – Media Player 10 Mobile - Includes Calendar, Contacts, Tasks, Voice Recorder, Notes, Word Mobile, Excel Mobile, PowerPoint Mobile, Internet Explorer Mobile, Windows Media Player 10 Mobile, Calculator, Pictures, Jawbreaker, Solitaire, Messaging, File Explorer, MSN Messenger, Terminal Services Client, VPN Client, Infrared Beaming, Clock, Align Screen, Memory, Volume control, Landscape Mode support, WPA (Wi-Fi Protected Access); Bluetooth utility, Certificates Manager, Password setting, Today theme tool, Download Agent
  - Additional hardware included – Docking cradle, AC adapter, stylus
  - Additional information –  
[http://www1.us.dell.com/content/products/productdetails.aspx/axim\\_x51v?c=us&cs=19&l=en&s=dhs&~tab=viewstab#tabtop](http://www1.us.dell.com/content/products/productdetails.aspx/axim_x51v?c=us&cs=19&l=en&s=dhs&~tab=viewstab#tabtop)
  - Estimated price \$499.00                      Sale \$374.00



- Recommended accessories for Dell Axim X51
  - 2200mAH second longer life battery
  - Rhinoskin aluminum hardcase

## EXPANDED MANAGER PDA (Updated 8/09/2006)

- Dell Axim X51v
  - Security – Wireless Security
  - Wireless – IrDA, Bluetooth, IEEE 802.11b
  - Processor – Intel® 624 MHz
  - Memory – 64MB RAM 256MB Flash ROM
  - Operating System – Windows Mobile 5.0
  - Weight – 6.2 oz
  - Dimensions – 4.7" x 2.9" x .7"
  - Expansion slot – SD and CF slots
  - Display – 3.7" transfective VGA TFT display, portrait and landscape modes, LED backlight with power save mode
  - Input type – Stylus, Touch-screen
  - Software – Media Player 10 Mobile - Includes Calendar, Contacts, Tasks, Voice Recorder, Notes, Word Mobile, Excel Mobile, PowerPoint Mobile, Internet Explorer Mobile, Windows Media Player 10 Mobile, Calculator, Pictures, Jawbreaker, Solitaire, Messaging, File Explorer, MSN Messenger, Terminal Services Client, VPN Client, Infrared Beaming, Clock, Align Screen, Memory, Volume control, Landscape Mode support, WPA (Wi-Fi Protected Access); Bluetooth utility, Certificates Manager, Password setting, Today theme tool, Download Agent
  - Additional hardware included – Docking cradle, AC adapter, stylus
  - Additional information –  
[http://www1.us.dell.com/content/products/productdetails.aspx/axim\\_x51v?c=us&cs=19&l=en&s=dhs&~tab=viewstab#tabtop](http://www1.us.dell.com/content/products/productdetails.aspx/axim_x51v?c=us&cs=19&l=en&s=dhs&~tab=viewstab#tabtop)
  - Estimated price \$499.00                      Sale \$374.00



- Recommended accessories for Dell Axim X51
  - 2200mAH second longer life battery
  - Rhinoskin aluminum hardcase

## DIGITAL PROJECTOR (Updated 8/09/2006)

This is a recommendation only. FMCSA does not limit procurements of digital projectors to the unit listed in this specification.

- Dell 3400MP
  - Lumens – 1500
  - Weight – 2.4 lbs
  - Resolution – XGA (1024x768) w/ autosync to UXGA (1600x1200)
  - Contrast – 2100:1
  - Zoom/Focus – Manual zoom and focus
  - Picture size – 31.7” – 246”
  - Computer display compatibility – XGA, SXGA, SVGA, VGA, UXGA
  - Remote – Full projector control, wireless
  - Warranty – 2 year advanced exchange
  - Additional information –

[http://www.dell.com/content/products/productdetails.aspx/proj\\_3400mp?c=us&cs=04&l=en&s=bsd](http://www.dell.com/content/products/productdetails.aspx/proj_3400mp?c=us&cs=04&l=en&s=bsd)

- Estimated price \$1099.00



\* NOTE: The **Dell 2400MP** is also an excellent choice. It displays 3000 lumens and weighs 5.5 lbs. The projector is the same price but it is larger in size and weight.

\* NOTE 2: **Interlink Electronics Point Navigator Wireless Remote Control** is an excellent wireless remote for use with presentations. Adapter attaches to USB port and does not require additional software.



## **BARCODE SCANNER/READER (Updated 3/09/2007)**

- Handheld 4600g
  - USB HID POS Terminal 131 Compliant
  - Weight – 6.5 oz
  - Terminal ID 131 Compliant
  - Size – 6.2" x 5.3" x 3.2"
  - Warranty 5 years

Additional information

[http://www.handheld.com/Site.aspx/na/en/product\\_center/hardware/?product=35](http://www.handheld.com/Site.aspx/na/en/product_center/hardware/?product=35)



\* NOTE: This Barcode scanner/reader is for use with the Aspen roadside application.

## DC POWER ADAPTERS FOR PANASONIC (Updated 3/09/2007)

This specification will be used when procuring a DC power adaptor for Panasonic CF-48, 50, CF-72, and W2 laptop computers. This adapter will operate the laptop and charge the battery in an automobile.

- Lind 80 Watt Adapter for Panasonic laptop computers PA1555-655
  - Compatibility –CF01, CF17, CF18, CF19, CF25, CF27, CF28, CF29, CF30, CF33, CF34, CF35, CF37, CF45, CF47, CF48, CF50, CF51, CF61, CF62, CF63, CF71, CF72, CF73, R1, R4, R5, T1, T2, T4, T5, W2, W4, W5, Y2, Y4, Y5
  - Weight – 13 oz
  - Size 5.0 x 3.0 x 1.0
  - Input Voltage – 11 to 16 Vdc
  - Input Noise Filter
  - Output Voltage 15.6 Vdc
  - Output Current 5.5 amps (max)
  - Connector MP205 R/A
  - Auto Input Cable 18 Inches
  - Output Cable 36 Inches
  - Internal Overtemperature Shut Down
  - Low Input Voltage Shut Down
  - High Input Voltage Shutdown
  - Automatic Shut Down Reset
  - Warranty – 3 year, covers electronics, cables and connectors
  - Additional information:  
[http://www.lindelectronics.com/cgi-bin/store/shop.cgi!/ORDERID!/aaa/PA1555-655/dbx\\_gen\\_detail\\_product](http://www.lindelectronics.com/cgi-bin/store/shop.cgi!/ORDERID!/aaa/PA1555-655/dbx_gen_detail_product)



- Estimated Price \$99.95

\* Please note this adapter can not be used in the airline in-seat power systems. The air in-seat power systems are limited to an output of only 75 Watts.

## **LAPTOP CARRYING CASE (Updated 5/11/2007)**

Model unspecified, but should, at minimum, accommodate laptop, printer, and all accessories. Suggested manufacturers, include Tenba and Targus. Styles to consider include wheeled, over the shoulder portfolio, and backpack. Models to consider include:

Targus – Top-loading Air Universal	(\$ 99)
Targus – Port 3.1 Easyroller Case	(\$149)
Targus – Global Executive Universal Case	(\$129)

## MEDIA TYPES (Updated 5/16/2007)

Recommended media types (floppy disk is no longer recommended, but continue to be serviceable):

- CD-RW – Re-writable CD format, 700 MB capacity.
- CD-R – Write-once CD format, 650 MB capacity.
- DVD-RW + -Re-writable DVD format, 4.7 GB capacity.
- Mini CD-R – Ritek RiData Mini CD-R, 210 MB capacity.
- USB Flash Drives – Solid state drive, nonvolatile Compact Flash memory, plugs into USB port, Re-writable, recommended capacity 512 MB or higher. These drives may be used with any Windows 2000/XP computer with a USB 1 or 2 drive. The recommended flash drive is SanDisk 256 MB Cruzer.
- SD card – Secure Digital card (32 x 24 x 1.55 mm), solid state nonvolatile flash memory, high data transfer rate and low battery consumption, recommended capacity 1 GB. An SD card is about the size of a postage stamp and weighs approximately two grams. The SD card is used for removable data storage. The recommended SD Card is SanDisk 1GB Ultra II.



- miniSD Card – ( 21.5 x 20 x 1.4 mm) A removable portable memory device intended for use in cell phone, digital cameras, MP# other devices.



- Compact Flash II card – (43 x 36 x 5.5 mm) CF cards are nonvolatile solid state flash memory cards approximately the size of a matchbook. Recommended capacity 1 GB. CF cards are used by the Canon S45 digital camera for removable storage. The recommended CF card is the SanDisk 1GB CompactFlash.



- RS-MMC – Reduced Size multiMediaCard (24 x 18 x 1.5 mm) a smaller MMC card, can be used in any MMC or (SD) slot. Sizes available up to 4GB.



- Memory Stick – (50 x 21.5 x 2.8 mm) A flash memory card format mainly used in Sony and Sony Ericsson devices. Current models up to 8GB with potential availability up to 32GB.

